

February Meetings

Dates & Times

Matinee, 2:30 p.m. Wednesday,
February 10, 1982

Evenings, 8:00 p.m. Wednesday and
Thursday, February 10 and 11, 1982

Place

May Treat Morrison Auditorium

Speaker

Dr. Robert Drewes

Subject

"Invasion of the Land"



Chiromantis petersi, an African "waterproof" Treefrog

In January of this year KQED introduced a remarkable new BBC series entitled "Life on Earth" to American audiences. Academy members will be able to enjoy one of these films, "Invasion of the Land", on the big screen. Academy herpetologist, Dr. Robert Drewes, will introduce this film and discuss his own research on African frogs.

In "Invasion of the Land", British naturalist David Attenborough documents the emergence of the first terrestrial vertebrates — the primitive amphibians and their modern counterparts. Also included are the only movies of a living Coelacanth and some of the most amazing shots ever taken of rare and bizarre creatures including flying frogs and mud-dwelling lungfish.

Your membership card admits you through the main entrance of Cowell Hall for the evening presentations and through Cowell Hall and Wattis Hall entrances for the matinee. Please be prepared to show your card once again at the auditorium door for the matinee presentation.

The California Academy of Sciences wishes to acknowledge with thanks a generous contribution from Foremost-McKesson Foundation, Incorporated, to support the monthly members' lectures.

Special Exhibits

Roger Tory Peterson: Portrait of a Bird-watcher continues through March 14 in Lovell White Hall and Hohfeld Gallery II. Original paintings and color plates from Peterson's well-known Field Guide series and memorabilia from his studio in Old Lyme, Connecticut give an intimate view of the artist and his work.

Three fine arts posters commemorating the Roger Tory Peterson exhibition are for sale at the Nature Company Museum Shop, and a complete line of Peterson Field Guides is available from \$6.95 to \$15.

Continuing photo exhibits are: **The Black-tailed Deer** by Napa photographer Ken Herrington; **Flight** by Frans Lanting and David Cavagnaro; and **Egrets** by Philip Loring Greene.

Morrison Planetarium

Cosmic Catastrophes continues through April 18 in the Morrison Planetarium.

Showtimes:

Monday through Friday at 2:00 p.m.

Saturday and Sunday at 12:30, 2:00 and 3:30 p.m.

Wednesday and Thursday at 7:30 p.m.

Exploring the Skies of the Season, a tour of the current night sky over San Francisco, can be seen every Saturday and Sunday at 11:00 a.m. Please use your complimentary passes for free admission to both of these shows.

The Nature Company will hold its annual sale February 6 through 21. Reductions will include 10% to 50% on selected merchandise (except limited edition art). Please Note: The usual members' 10% discount will not apply to sale items.

Light Shows

Experience Eye See the Light Show, Inc's four dazzling presentations under the 65-foot dome of the Morrison Planetarium.

Spotlight: The Beatles — Thursday and Sunday at 9:00 p.m.

Lights Fantastic — Saturday and Sunday at 5:00 p.m.

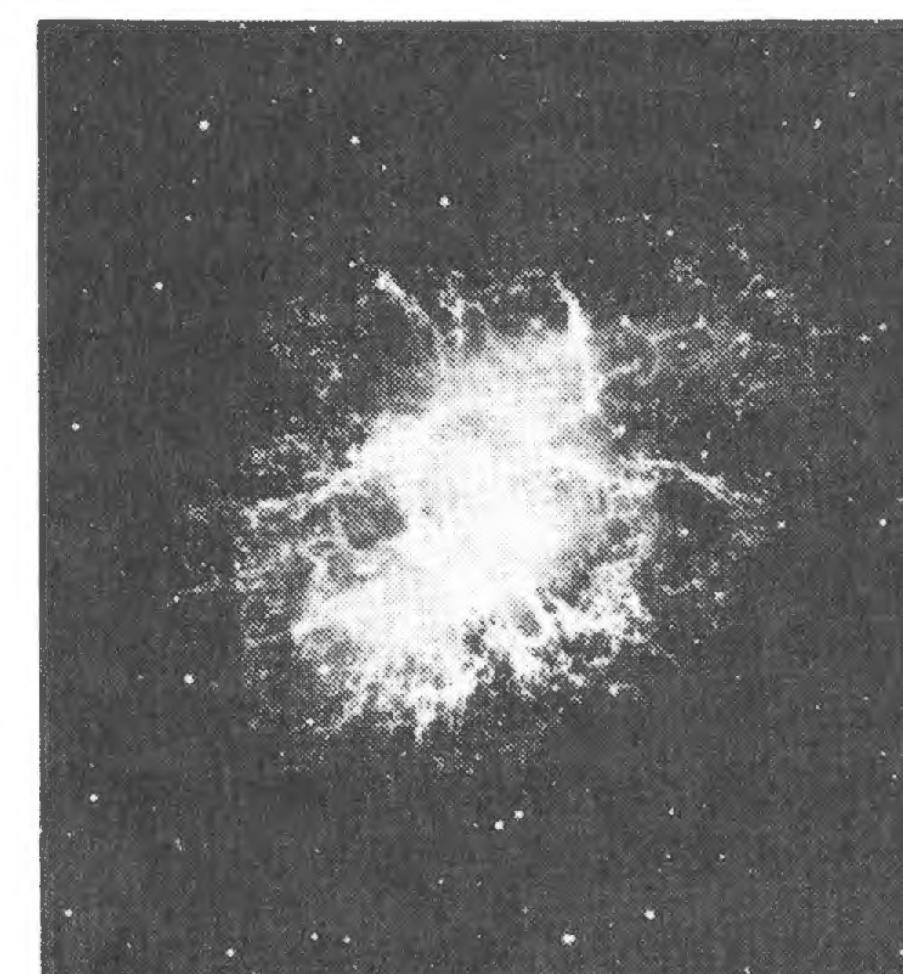
Rock Fantasy — Friday and Saturday at 9:00 and 10:30 p.m.

Sunday at 7:30 p.m.

The War of the Worlds — Friday and Saturday at 7:30 p.m.

Tickets are available through BASS at 835-3849. Admission for adults is \$4.00 for evening presentations and \$3.50 for matinee (5:00 p.m.). Admission to all shows for children 10 and under and for senior citizens is \$2.00. Members are reminded that these are **not** regular planetarium shows, so your planetarium passes are **not** usable for these presentations.

Inside the Academy



A Special Evening With The Junior Academy

Tuesday, February 23, 1982 from 7:00 to 8:30 p.m. in the Morrison Planetarium.

Join us for an informal and exciting "**Evening under the Stars**" when we will explore the planets, constellations and nebulae of our current sky, the "great planetary grouping" of the 1980's and the birth and death of black holes and stars.

This special evening is for members of the Junior Academy and their families. Membership to the Junior Academy is \$5.00 per year and is waived if parents have a family membership to the California Academy of Sciences. Admission to the "**Evening under the Stars**" is free. However, since seating is limited, please call the Junior Academy at 221-5100 to reserve your seats.

Special Lecture

The Future of Wildlife in East Africa

Speaker: Dr. David Western
Thursday, March 18, 1982 8:00 p.m.
Morrison Auditorium



Try to picture yourself as a rancher, perhaps trying to raise cattle on your land. In the dry season wild animals including buffalo, cheetah, rhino and zebra wander onto your land to graze and water, using up the resources reserved for your livestock. This was exactly the situation in East Africa when Dr. David "Jonah" Western arrived in Kenya's Amboseli region in 1967. Over the past 13 years Dr. Western, zoologist, has worked to establish a peaceful and profitable coexistence for the Maasai ranchers and the Amboseli Wildlife Park.

In Western's beautifully illustrated slide/lecture he will discuss his current work as consultant on national parks planning and ecological monitoring in East Africa, which reflects his commitment to careful development and preservation of human and wildlife resources.

This special lecture is co-sponsored by the California Academy of Sciences and the L.S.B. Leakey Foundation. Admission is \$3.00 for Academy and Leakey Foundation members, and \$4.50 for non-members. For reservations please send a check made payable to the CALIFORNIA ACADEMY OF SCIENCES, with a stamped self-addressed envelope to LEAKEY LECTURE, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. Please be sure to include your daytime telephone number.

How does your garden grow?

A One-day Symposium on Saturday, March 20, 1982

Beginning at 9:00 a.m. in Morrison Auditorium

It's Spring, When a young man's fancy turns to . . . gardening!

Join us for a view of what one can achieve with a nurturing spirit and some helpful tips from the experts. Whether your pleasure is a lovely floral garden, an abundant vegetable garden, or a bit of both, we will offer practical suggestions for experienced "green thumbs" and for those whose garden is as yet only a dream.

9-9:30 Flowers, Pollination and Seeds"

Dr. Glenn Keator, *Director of Education, Strybing Arboretum*

Land plants, unlike most animals, cannot move about freely in search of their mates. However, many of the flowering plants have adapted a remarkable array of floral features which attract animal visitors that in turn transfer pollen from one flower to another. We will look at the dynamic process of pollination and at seed diversity and dispersion.

9:30-10:15 "Nature Teaches Us All That We Need To Know

David Cavagnaro, *Photographer, naturalist, author and farmer*

A personal awareness of the needs of plants and the habits of creatures we view as "pests" yields valuable information about how to live productively with, rather than against the laws of nature. A number of practical "pest control" procedures will be given, demonstrating that effective methods can come from one's own careful observations.

10:15-10:30 Break

10:30-11:15 "The History of the Filoli Gardens"

Mr. Hadley Osborn, *Executive Director, Filoli Center*

Join us for a slide tour to Filoli. The magnificent mansion and gardens were built at the turn-of-the century in Woodside. After completion of the mansion in 1921, work began immediately on the 16 acres of formal gardens. So idyllic was the original design, prepared by Bruce Porter, that today the gardens remain true to that design. The Filoli Center maintains the property, which is now open to the general public.

11:15-12:00 "Small Garden Design"

Mr. Tom Brown, *Lecturer, Department of Landscape Architecture, University of California, Berkeley*
Lecturer, Dept. of Landscape Horticulture, Merritt College

For our purposes, a "small garden" is a standard-sized San Francisco lot, no larger than one acre. Small space requires careful planning to maximize effective use and aesthetic appeal. We will learn how to create gardens that are stylistically correlated with various types of homes, ranging from the formal to the informal. We will also look at some common mistakes made in planting design.

Noon-1:00 Lunch Break

1:00-1:30 Film: "Ruth Stout's Garden"

A lively and affectionate portrait of a 92-year-old woman who grows all of her own food in a small garden.

1:30-2:15 "Pippindale: The Development of an Organic Garden"

David Cavagnaro, *Photographer, naturalist, author, farmer*

We will see how, with hard work and simple tools, a lifestyle can be carved out of a land which is considered marginal. The efficiency of a home-based lifestyle will be contrasted with "agribusiness" and technological approaches. Diversity in a garden and the broad genetic base of ancestral and heirloom varieties will be discussed as important aspects of a viable agriculture.

2:15-3:00 "Gardens for the City Dweller"

Holly Kaufman, *Consultant to The Farallones Institute*

Restricted in available space for your garden? We will learn about some of the innovative methods of non-chemical food production which cope with the urban restraints of space, time, light and materials for the San Francisco Bay Area.

3:00-3:15 Break

3:15-4:00 "Vegetable Breeding Today: The Source of Cultivars for Tomorrow"

Dr. Charles M. Rick, *College of Agriculture and Environmental Sciences, University of California, Davis*

What have researchers done in the past, and what are they doing today to improve the types of plants available for commercial and home use? Several methods of vegetable breeding are practiced today, including hybridization and cloning. We will look at some of these methods, why they are used, and what they promise for the future.

4:00-4:45 "Hydroponics: Is Solution Culture the Solution?"

Jack Norland, *College of Agriculture and Environmental Sciences, University of California, Davis*

Many people think of hydroponics as a current development in the field of horticulture. Actually, related experiments with growing plants in nutrient solutions began as early as 1699. We will discuss the development of hydroponics, its use in research, as a hobby, for commercial purposes, and its applications in the future.

Ticket Information and Reservation Form

Tickets are available for the symposium **How Does Your Garden Grow?** with this registration form. Reservations will be accepted in order of receipt and unfortunately telephone reservations cannot be accepted for this event. Tickets will be sold at the door on a space available basis.

For further information please call the Education Office at (415) 221-5100.

TICKET ORDER FORM

Please mail this form with check made payable to the CALIFORNIA ACADEMY OF SCIENCES, and a self-addressed, stamped envelope to:

HOW DOES YOUR GARDEN GROW?
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

Price: Members \$5.00
Non-Members \$7.00

Name _____

Address _____

Zip Code _____

Daytime Telephone # _____

Tickets @ \$5.00 _____

Tickets @ \$7.00 _____

Total Amount Enclosed _____

NO REFUNDS/NO EXCHANGES

Education and Travel

Expand your horizons! Explore the world of nature as a participant in an Academy Adult Education course. Six fascinating and informative courses begin in February and March. Information appears in your Spring Activities Calendar. For a copy of the calendar and additional information, please call the Education/Travel Office at (415) 221-5100, ext. 211.

WINTER PHOTOGRAPHY IN YOSEMITE
February 10 and March 3 (Lectures)
7 - 9:00 p.m.

February 19 - 21 (field trip)

Instructor: Robert Holmes

Cost \$110 members, \$125 non-members, includes instruction and accommodations at Curry Village, Yosemite

The special problems of winter photography in low-light situations and the aesthetics of wilderness photography.

ARCHEOASTRONOMY: Ancient Astronomical Lore
March 2 - 16

(3 Tuesdays)

7 - 9:00 p.m.

Instructor: Walt Terris

Cost: \$15 members, \$20 non-members

Ancient astronomy of the Sumerians and Babylonians, the megalithic observatories such as Stonehenge, and the astronomical science of the Mayans.

FOCUS ON MAN: Anthropology Through Films

March 2 - April 6

(6 Tuesdays)

Instructor: Dr. Dorothy Washburn

Cost \$25 members, \$35 non-members

A selection of ethnographic "classics" demonstrating the use of film as a powerful tool in the study of anthropology.

ANIMAL DRAWING

April 12 - May 3

(Mondays)

7 - 9:30 p.m.

Instructor: Doris Alcorn

Cost: \$35 members, \$40 non-members

Learn to draw animals using the Academy's collections and exhibit areas after the museum has closed to the public! Beginners and advanced students welcome.

An Indian Ocean Odyssey

April 15 - May 16

Embark on the *Lindblad Explorer* in Singapore for a voyage in the Bay of Bengal and across the Indian Ocean. Ports-of-call during the first portion of this journey include Phuket in Thailand, Rangoon, and flights to Pagan and Mandalay in Burma, and Trincomalee and Colombo in Sri Lanka. The Maldiv Islands and the Seychelle Islands are the exciting destinations of the second portion of the voyage. You may select one or both programs. For information, call the Academy Travel Office at (415) 221-5100.

Chesapeake Bay and Highlights of the Smithsonian

May 4 - 15

With the leadership of geologist Charles Chesterman, members will fly to Washington, D.C. to begin a fascinating tour through our nation's vast museum complex, the Smithsonian Institution. Special tours have been arranged to include many behind-the-scenes visits to the Natural History Museum, the National Air and Space Museum and more. Some time will be spent viewing the monuments and government buildings of picturesque Washington, D.C. before members embark on an exciting 7-day cruise through Chesapeake Bay. Cost is \$1403 for land/cruise arrangements and \$450 for air. For information, please call Siemer & Hand, Ltd. at (415) 788-7186.

Alaskan Cruises

May 7 and May 17

Members will board the *M.V. Majestic Alaska Explorer* for cruises into the more remote regions of southwest Alaska. Dr. and Mrs. Robert T. Orr will accompany Academy members as they explore scenic fiords, bays and beaches, and observe black bears, humpback whales and more. Spaces are available on both cruise dates. For information and a brochure, please call the Academy Travel Office at (415) 221-5100.

Snake River Birds of Prey Expedition

May 22 - 27

Naturalists Bob Nansen and William Meiners will lead Academy members on a six-day field study tour into the scenic Snake River Birds of Prey Area. The densest

known nesting population of birds of prey, including 14 species of falcons, eagles, hawks, owls and more than two hundred pairs of the rare prairie falcon, live in the Snake River canyon. From home base in Boise, outings will be by van and by foot, plus two "day" float trips on the Snake River. Cost is \$650 per person, plus air fare. For information, please call Betchart Expeditions at (408) 245-9517.

Darwin's Galapagos

June 30 - July 13

Friendly sea birds, sea lions, marine and land iguanas, and famous Galapagos tortoises await Academy members on our annual tour to those "living laboratories of evolution" known as the Galapagos Islands. We will cruise in comfort aboard the M.V. Santa Cruz through the island chain, going ashore by small boats called "Humbers" and exploring on foot. A fine group of naturalists will lecture on the splendid array of flora and fauna and the geologic history of the islands. Costs range from \$2400 to \$3230 per person, depending upon your accommodations aboard, plus air fare. For information and a colorful brochure, please call the Academy Travel Office at (415) 221-5100.

Kenya Safari

August 6-28

Gorilla Tracking in Rwanda

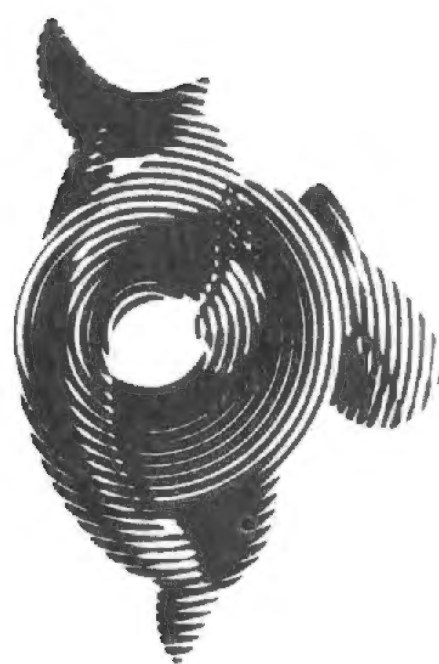
August 26 - September 4

Kenya is a land of great contrasts, from broad sweeping savannah lands to lush mountain peaks. This special itinerary is designed to cover the diverse regions of this colorful African country. Dr. Robert Drewes will lead members on a safari that includes Tsavo National Park, Amboseli National Park, Mountain Lodge for night-time game viewing, Samburu National Park, and camping in the Lake Baringo area and the Maasai Mara Game Reserve. We will fly to Mombasa to relax on Kenya's scenic beaches before our return home. An optional extension into the jungle regions of Rwanda to meet, face-to-face, with the remarkable mountain gorillas is offered for those who wish to participate in a truly unique African experience. Cost is \$3190 for the Kenya portion, plus air fare. The Rwanda extension is \$1115 plus air fare. For information, please call Siemer & Hand, Ltd. at (415) 788-7186.

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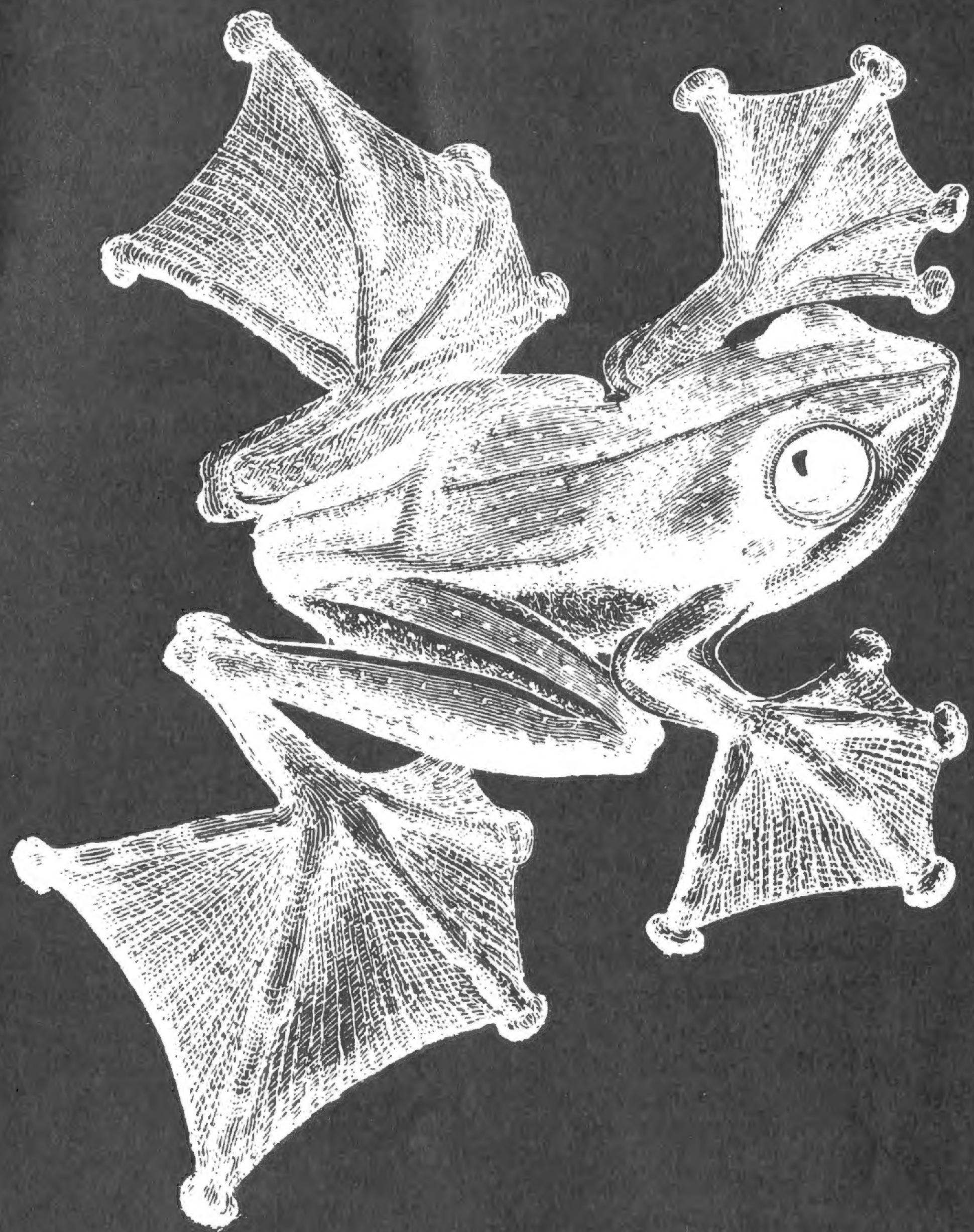
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